MODIS TECHNICAL TEAM MEETING

31 Oct., 1996

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were Harry Montgomery, Robert Murphy, Ed Masuoka, David Toll, Barb Conboy, Eric Vermote, Dorothy Hall, Bruce Guenther, Bill Barnes, Dick Weber, Steve Platnick, Steve Ungar and Wayne Esaias.

1.0 SCHEDULE OF EVENTS

2.0 MINUTES OF THE MEETING

2.1 Overview

Salomonson reported that Dale Harris is no longer manager of EOSDIS. Rick Obenschain formerly the Landsat-7 Project Manager is now manager of EOSDIS. Phil Sabelhaus is now the Landsat-7 Project Manager.

2.2 Instrument Update

Weber reported that the defective MODIS resistor networks have been replaced. Weber reported that the hybrids on the PM are leaking air during vacuum testing. He said they can get new ones in nine months, but that is considered too long with the resolution now pending.

2.3 MCST Reports

Montgomery reported the MCST ATBD is currently under revision. Guenther said they gave to Murphy a one page validation plan of the Level 1b data product. Guenther said that MCST will make available for the MODIS team to examine over a one month period a Beta version of their Level 1b product file format data (Version 2). Guenther reported that the 12 bit MODIS data will be in a 15 bit integer format to permit integer processing. Gain and offsets will be provided for conversion to reflectance. Barnes and Guenther said that a contrast index will be available on a pixel by pixel basis. The contrast index may provide information for the usefulness of the data. Guenther said that the EOS AM instrument team agreed upon a maneuver that Kaufman will soon sign.

2.4 SDST Reports

Masuoka said they are addressing several issues related to the ECS Release B document. First, SDST is investigating possible scheduling related limitations (i.e., limit to number of jobs they can schedule per day). The scheduling problem may limit us to a 40% production capacity of MODIS data. Masuoka will seek to further clarify this possible problem from ECS. He said that Level 3 Products will still be able to be processed. Vermote said that MODIS may need to develop prioritizations and contingency plans to meet any limitations. Guenther and Masuoka said that more interactions between SDST, MCST and the Science Team will occur for contingency planning with the DAAC. It was noted that elimination of MODIS products as a possible option is strongly not recommended by the Science and Technical Team. However subsetting, pixel resolution changes, and other issues will be

considered. Masuoka said NSIDC wants to ensure they have first priority. He reported that some of the NSIDC equipment may be sent to the Goddard DAAC.

Masuoka said that he met with Murphy and Bill Campbell (Information and Technology Branch, Code 935) on having a capability for development to have a direct broadcast of MODIS data transmitted in the X-band at EOS-AM rates for ~80K. The development cost may be 300K, with 80K per system. This includes the entire package, comprising the antennae and work station. In addition, Code 935 is coordinating remotely piloted tests and are interacting with Eric Vermote.

2.5 Discipline Reports

Platnick wants the geolocation information included with the Level 1b data. Guenther said Fleig made an excellent case not to eliminate the geolocation file. Guenther said they can provide the latitude and longitude for the nadir pixel. Platnick said they requested the full geolocation information at the 1 km level. MCST and SDST will examine solutions with the Atmosphere and the Oceans groups. In addition, the Atmosphere Group wants spatial averaging (e.g., using a point spread function) to a 1 km capability in Level 1B data to reduce processing times. Masuoka said averaging is possible but would require additional flops. Currently the averaging is written as a tool. Masuoka will coordinate a meeting to further discuss Level 1b issues.

Vermote said ATBDs will be completed by Nov. 1. Vermote is coordinating an atmospheric correction workshop with ASTER, MODIS, and MISR.

Ungar said that there is an upcoming Goddard DAAC (GDAAC) User Working Group (UWG) meeting in two weeks. He said that the DAAC is supporting many groups within Code 900 and it would be a good idea for MODIS to be present at the UWG meeting to ensure its needs are adequately represented visa vis the other attendees. Ungar said that there is currently no MODIS Science Team member on the GDAAC UWG.

2.6 MAST Reports

Conboy gave a summary of the Action Items from the October MODIS Science Team Meeting for review. The Science Team, SDST and MCST action items will be consolidated. Conboy notes that there are six ATBDs still outstanding.

3.0 Action Items

1. Masuoka to coordinate a Level 1b data product meeting with MCST, SDST, Oceans and Atmospheres.
2. Masuoka and Guenther to coordinate a contingency plan with the MODIS Science & Technical Team to reduce, if necessary, with priorities, MODIS processing in order to meet possible ECS constraints (e.g., 40% reduction from scheduling problems).